



Dietary Supplements: Risky Business for Readiness

**Accessions Research
Consortium**

May 2003



Learning Objectives

- Provide a Dietary Supplement Overview**
- Discuss usage among soldiers**
- Describe available dietary supplement awareness/education resources**



Outline

- **The Law**
- **The Current Situation**
 - **What soldiers are using**
 - **Why they are using supplements**
- **The Resources**



A Dietary Supplement is...

a tablet, capsule, powder, soft-gel, or liquid product that contains at least one of the following:

- Vitamin**
- Mineral**
- Herb or botanical**
- Amino acid**
- A concentrate, metabolite, constituent, or extract of any of the above**



The Law

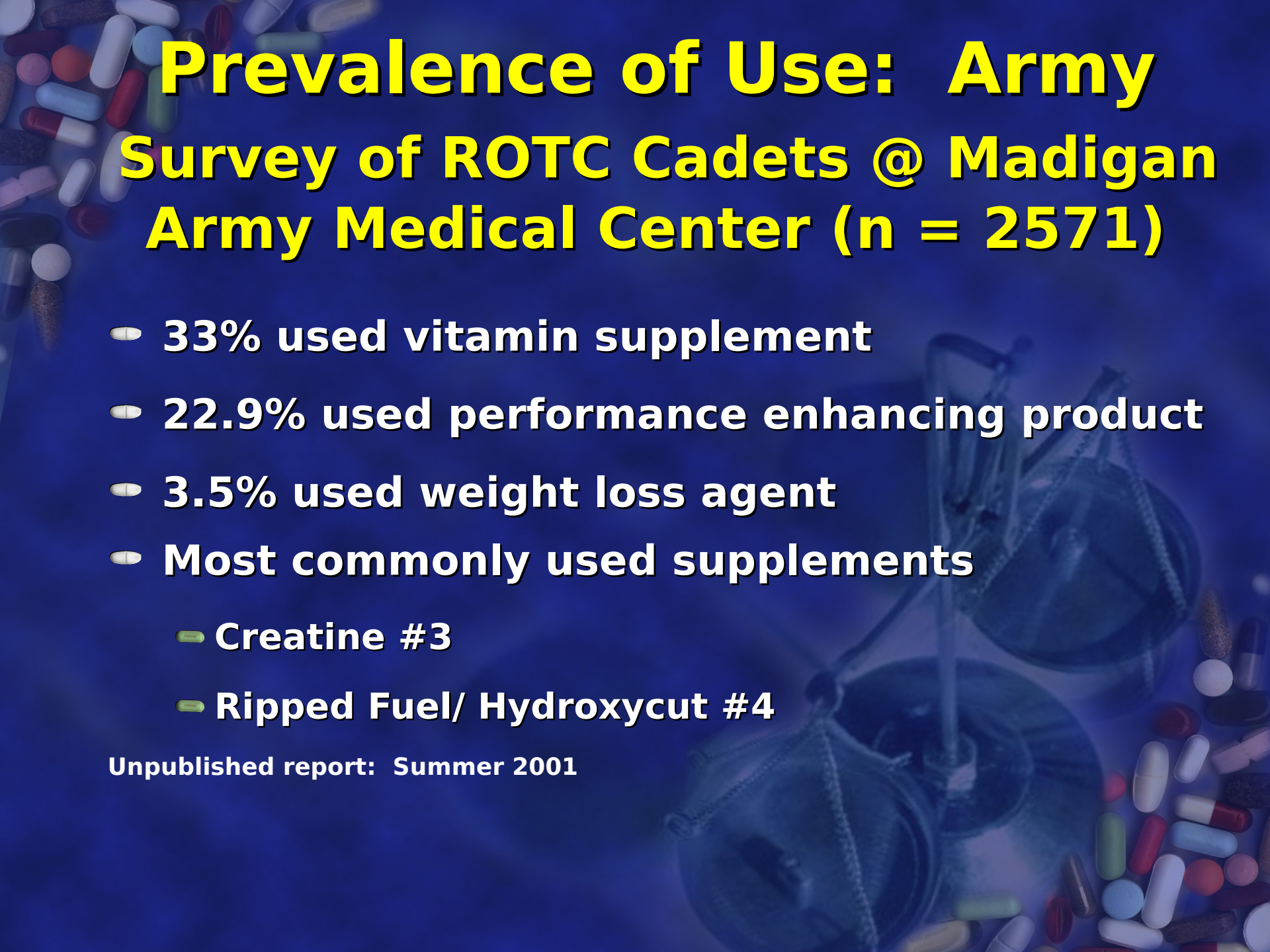
- **Dietary Supplement Health and Education Act (DSHEA): 1994**
 - **Dietary supplements are NOT regulated like food and drugs**
 - **No FDA approval necessary to sell**
 - **Manufacturer's Responsibility**
 - **Truthful Labeling**
 - **Safe Ingredients**



Prevalence of Use Navy Survey

- **71% Special Operations**
- **71% Marine Recruits**
- **42% Regular Army**

**Source: Naval Health Research Center Survey, Reported
Feb 2000**



Prevalence of Use: Army Survey of ROTC Cadets @ Madigan Army Medical Center (n = 2571)

- **33% used vitamin supplement**
- **22.9% used performance enhancing product**
- **3.5% used weight loss agent**
- **Most commonly used supplements**
 - **Creatine #3**
 - **Ripped Fuel/ Hydroxycut #4**

Unpublished report: Summer 2001



Top Ten DS Consumed

1. Multivitamin

2. Vitamin C

3. Creatine

4. Ephedra

5. Ginseng

6. Calcium

7. Vitamin E

8. Vitamin A

9. Iron

10. Garlic

Source: CPT Karen Brasfield, MS, RD: Dietary Supplement Intake in Active Duty Enlisted Population, August 2002

Top Ten - Among Men

1. Multivitamin

2. Vitamin C

3. Creatine

4. Ginseng

5. Ephedra

6. Calcium

7. Vitamin E

8. Garlic

9. Vitamin A

10. Iron

Source: CPT Karen Brasfield, MS, RD: Dietary Supplement Intake in Active Duty Enlisted Population, August 2002



Top Ten - Among Women

1. Multivitamin

2. Vitamin C

3. Calcium

4. Ephedra

5. Iron

6. Prenatal

7. Vitamin A

8. Vitamin E

9. Ginseng

10. Vitamin B6

Source: CPT Karen Brasfield, MS, RD: Dietary Supplement Intake in Active Duty Enlisted Population, August 2002



Why Do Soldiers Consume Dietary Supplements?

- Promote General Health : 76%**
- Performance Enhancement: 54%**
- Weight Loss: 23%**
- Prevent Illness: 16.5%**

Source: CPT Karen Brasfield, MS, RD: Dietary Supplement Intake in Active Duty Enlisted Population, August 2002



Why the Concern?

- **Absence of Standards**
- **Contamination**
- **Dosage Amounts**
- **Combinations**
 - **Environment**
 - **Other medications**
 - **Other herbs**

FDA's Most Dangerous

- Chaparral
- Comfrey
- Yohimbe
- Lobelia
- Willow Bark
- Ephedra
- TRIAC (tiratricol)
- L-tryptophan
- Dieter's Tea
- GBL & BD
- Kava Kava
- Aristolochic Acid



Possible Dangers of Supplement Use


- **Dehydration**
- **Heat-Related Injuries**
- **Nervousness and Dizziness**
- **Changes in Blood Pressure and Heart Rate**
- **Heart Attack**
- **Stroke**
- **Seizure**
- **Psychosis**
- **Death**

Frequency of Adverse Events Among Supplement Users

n = 327


- **Palpitations: 46%**
- **Dizziness or Confusion: 30%**
- **Tremors: 25%**
- **Abdominal Pain: 24%**
- **Numbness of Extremities: 16%**
- **Loss of Consciousness: 4%**

Source: CPT Keri S. Smith, MSO in Military Supplement Intake in Active Duty Enlisted Population, August 2002

The background of the slide is a deep blue gradient. In the top-left and bottom-right corners, there are clusters of various pills and capsules in different colors (white, red, blue, green, brown). In the bottom-right corner, there is also a faint, semi-transparent image of a balance scale, symbolizing the balance between diet and medicine.

Dietary Supplement Awareness/Education Resources

Dietary Supplement Website

Address  <http://chppm-www.apgea.army.mil/dhpw/Wellness/dietary.aspx>



USACHPPM

Readiness thru Health

[USACHPPM Search](#)

search

US Army Center for Health Promotion and Preventive Medicine

Health Promotion and Wellness (DHPW) - Wellness Program Resources and Services

[USACHPPM Home](#)

[DHPW Home](#)

[Population Program](#)

[Readiness Program](#)

[Wellness Program](#)

[All DHPW
Resources/Services](#)

[Subject Matter
Expertise/Consultative
Services](#)

DHPW

Dietary Supplements

(updated 31 October 2002)

[Dietary Supplements Fact Sheets](#)

[Dietary Supplements – Tri-fold Brochure](#) **New**

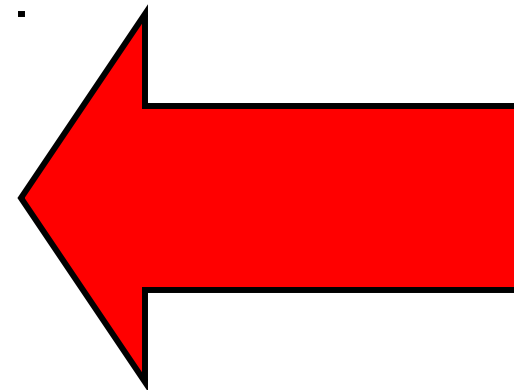
[Dietary Supplements General Resources](#)

[Dietary Supplements Internet Resources](#)

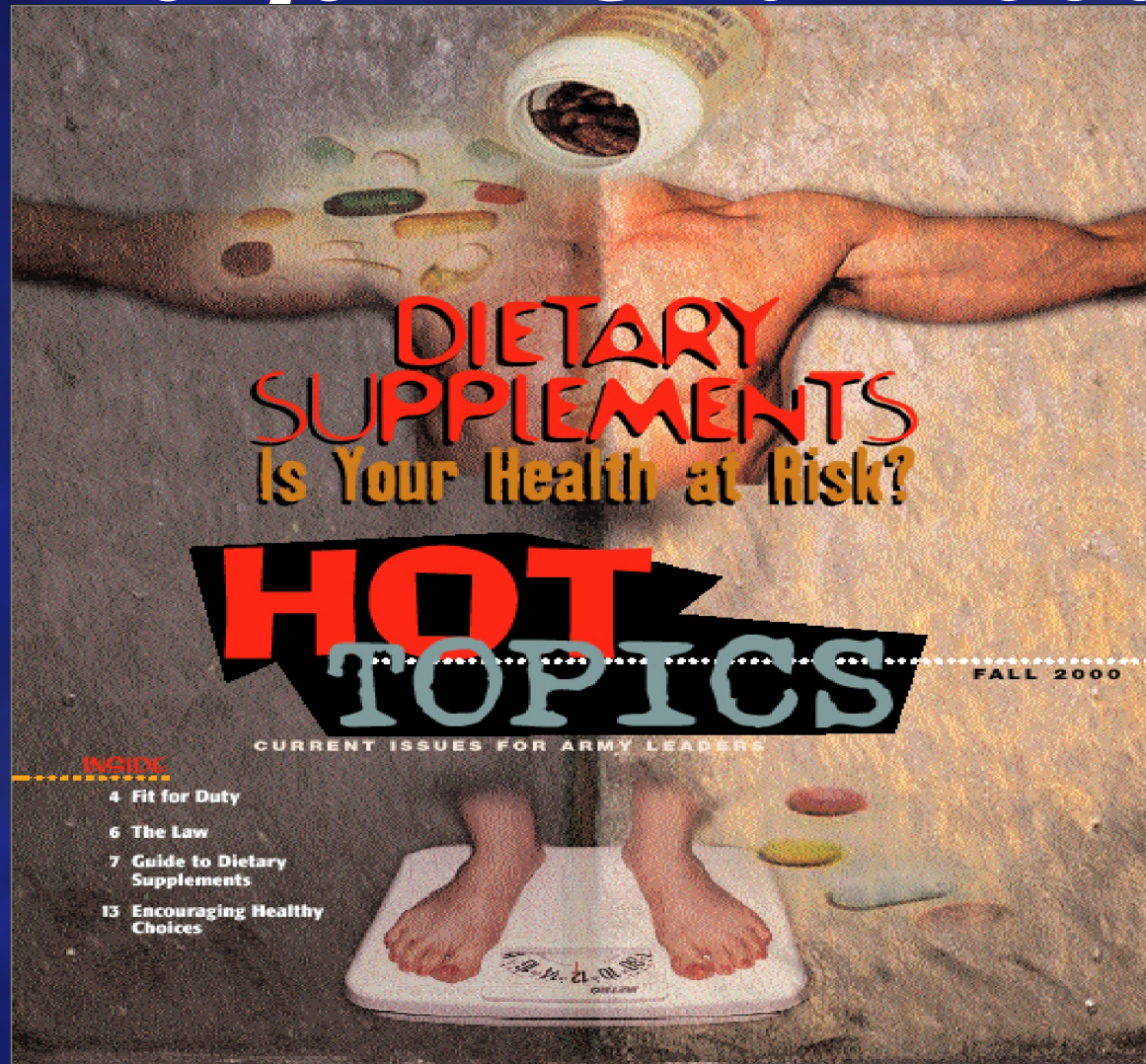
[Dietary Supplements Presentations](#) (.ppt and .pdf files)

[Dietary Supplements - Module 5, Power Performance...the Nutrition Connection](#)

[Dietary Supplements Health Care Provider Survey Results](#)



Insert in Soldiers Magazine Fall 2000



PPNC - Dietary Supplements



MODULE

1 Getting Started

MODULE

2 Building a Performance Diet

MODULE

3 Performance Choices

MODULE

4 Fluids: Your Key to Performance

MODULE

5 Dietary Supplements: A Basic Guide

MODULE

6 High Caliber Nutrition In The Field

7 Performance Your Weigh

Module 5: Dietary Supplements: A Basic Guide

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When Vitamin & Dietary Supplements Benefit	5-3
Sources Of Carbohydrate ...	5-4
How Much Protein Does It Take To Build Muscle?	5-5
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Does It Work?	5-9
You Can Choose Wisely ...	5-14
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This module of Performance Nutrition will investigate misleading nutritional information. This includes how the marketing of ergogenic aids and dietary supplements creates a false idea of what leads to good nutrition and performance and how the use of some of these products may hinder performance and pose a health risk.

participant's manual: module 5

Precautionary Notice

Valued Customers,

- AAFES urges you to *follow all dietary supplement label instructions and warnings* to include recommended serving sizes and frequencies.
- Taking more of the supplement than the label directs may cause medical problems and *will not* increase benefits.
- *Consult your health care provider* if you are taking any prescription or nonprescription drugs or are undergoing examination/treatment for any illness or disease condition.
- *Stop* taking any dietary supplement and consult with your health care provider if you are experiencing headaches, dizziness, visual disturbances, sleeplessness, loss of appetite, nausea or any other unusual symptoms.

Dietary supplements include: vitamins, minerals, energy enhancers, diet pills/formulations, herbs, weight gain/body building formulations. Several supplements may interfere with certain medications or aggravate existing medical conditions. Your health care provider needs to know which dietary supplements you are taking or planning to take.

Pregnant or nursing mothers should also consult with their health care provider prior to use of these products. Some dietary products are intended for use only by persons 18 years or older (again, please read all labels carefully).

For additional information or to REPORT adverse side effects and problems directly to the manufacturer, call the 1-800 number listed on the label. You may also report to the Food and Drug Administration (FDA) by calling 1-800-FDA-1088 or by Internet: (www.fda.gov/medwatch/reports/hcp.htm). AAFES also requests any problems be reported to store management.

Leave and Earning Statements

DEFENSE FINANCE AND ACCOUNTING SERVICE MILITARY LEAVE AND EARNINGS STATEMENT																		
ID	NAME (Last, First, MI)			SOC. SEC. NO.	GRADE	PAY DATE	YRS SVC	ETS	BRANCH	ADSN/DSSN	PERIOD COVERED							
ENTITLEMENTS				DEDUCTIONS				ALLOTMENTS				SUMMARY						
Type	Amount			Type	Amount			Type	Amount									
A												+Amt Fwd						
B												+Tot Ent						
C												-Tot Ded						
D												-Tot Allt						
E												=Net Amt						
F												-Cr Fwd						
G												= EOM Pay						
H																		
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K																		
L																		
M																		
N																		
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TOTAL												33.35		DIEMS 880601		RETPLAN CHOICE		
LEAVE		BF Bal	Emd	Used	Cr Bal	ETS Bal	Lv Lost	Lv Paid	Use/Lose	FED TAXES	Wage Period	Wage YTD	M/S	Ex	Add'l Tax	Tax YTD		
FICA TAXES		Wage Period	Soc Wage YTD	Soc Tax YTD	Med Wage YTD	Med Tax YTD	STATE TAXES	St	Wage Period	Wage YTD	M/S	Ex	Tax YTD					
PAY DATA		BAQ Type	BAQ Depn	VHA Zip	Rent Amt	Share	Stat	JFTR	Depns	2D JFTR	BAS Type	Charity YTD	TPC	PACIDN				
THRIFT SAVINGS PLAN (TSP)		Base Pay Rate	Base Pay Current	Spec Pay Rate	Spec Pay Current	Inc Pay Rate	Inc Pay Current	Bonus Pay Rate	Bonus Pay Current									
		TSP YTD Deductions				Deferred		Exempt										
REMARKS: YTD ENTITLE _____ YTD DEDUCT _____																		
<p>-ALERT!! VALIDATE YOUR DIEMS DATE. GO TO: HTTPS://WWW.PERSCOM.ARMY.MIL</p> <p>-EFFECTIVE JULY 1, 2003 THE PREMIUM RATES FOR SGLI/FSGLI WILL DECREASE. ANY MEMBER WHO DECLINED OR ELECTED LESS THAN MAX SGLI/FSGLI WILL REMAIN AT THOSE LEVELS AND WILL NOT BE AUTOMATICALLY ENROLLED IN SGLI/FSGLI. GO TO HTTP://WWW.INSURANCE.VA.GOV</p> <p>-YOUR 2002 FEDERAL AND STATE INCOME TAXES ARE DUE! FOR FREE TAX ASSISTANCE AND ELECTRONIC FILING, VISIT YOUR INSTALLATION TAX ASSISTANCE CENTER OR SUPPORTING LEGAL ASSISTANCE OFFICE.</p> <p>-MEMBERS DEPLOYED TO COMBAT ZONES OR QUALIFIED HAZARDOUS DUTY AREAS HAVE UP TO 11 DAYS AFTER RETURNING HOME TO FILE FEDERAL TAXES, NO INTEREST OR PENALTIES. GO TO HTTP://WWW.IRS.GOV</p> <p>-CAUTION!! LEARN MORE ABOUT DIETARY SUPPLEMENTS. VISIT HTTP://CHPPM-WWW.APGEA.ARMY.MIL/DHPW/Wellness/Dietary.aspx</p> <p>-YOU CAN NOW ACCESS YOUR MILITARY PAY INFORMATION LINE (IVRS) USING YOUR PIN FOR MYPAY (1-800-594-8302).</p>																		
www.dfas.mil																		

Now Available

*Choose the right
formula
for fitness*



*If you choose to use
dietary supplements,
consult
your health care
provider first.*



*To improve speed, strength
and performance*



For additional information, contact: chppm-www.apgea.army.mil/chppm/wellness/dietary.aspx

U.S. Army Center for Health Promotion and Preventive Medicine

If you are considering taking ephedra,
think about these possible risks:



Difficulty sleeping
Nervousness
Shakes
Headache
High Blood Pressure
Heart pounding
Seizures
Stroke
Heart Attack



Death!



For additional information, contact: chppm-www.apgea.army.mil/chppm/wellness/dietary.aspx

U.S. Army Center for Health Promotion and Preventive Medicine

Now Available

Choose



If you choose to use
dietary supplements,
consult
your health care
provider first.

To improve
and p

Facts About Dietary Supplements for the Warfighter

*Herbs and Botanicals
Amino Acids
Steroids
Vitamins and Minerals*



Considering taking ephedra,
at these possible risks:



Difficulty sleeping
Nervousness
Shakes
Headache
High Blood Pressure
Heart pounding
Seizures
Stroke
Heart Attack

Death!

dra

Now Available

BEWARE!



*These
can render
the most
powerful
weapon
USELESS!*

No one ever put a warning label on an orange

*Use food as your best body fuel
for strength and power*



U.S. Army Center for Health Promotion and Preventive Medicine

For additional information, contact: chppm-222.apgea.army.mil/dhpw/wellness/dietary.aspx



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CP-007-1102



In the Future...

- **User Pocket Guide**
- **Health Care Provider Pocket Guide**
- **Supplement Sense**
 - **Ft Drum**
 - **West Point**
 - **Ft Carson**
 - **Ft Bragg**



U.S. Army Center For Health Promotion
and Preventive Medicine
<http://chppm-www.apgea.army.mil/dhpdw>

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